

INP0006-US



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

ROBERT C. LOVELL, JR.

Serial No.: 10/724,106

Filed: December 1, 2003

For: SYSTEM AND METHOD FOR  
VIRTUAL CARRIER ADDRESSING  
AND ROUTING FOR GLOBAL  
SHORT MESSAGE SERVICE

Art Unit: 2618

Examiner: CHAN, Richard

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop: AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Further to the Notice of Appeal filed herewith, and prior to the filing of an Appeal Brief, Applicant respectfully requests review of the following rejections:

1. Claims 1, 3-5, 7 and 9-12 under 35 U.S.C. §103(a) as being unpatentable over McIntosh (U.S. 2003/0171119) ("McIntosh") in view of Serbetciouglu et al. (U.S. Patent 5,719,918) ("Serbetciouglu") and further in view of Papadopoulos et al. (U.S. Patent 6,978,156) ("Papadopoulos"); and
2. Claims 2 and 8 under 35 U.S.C. §103(a) as being unpatentable over McIntosh in view of Serbetciouglu and Papadopoulos, further in view of Lam et al. (U.S. patent 6,782,276) ("Lam").

The presently claimed invention is directed to methods and systems for routing messages, and in particular, foreign initiated messages that are routed using the SS7 protocol. In the claims, an intermediary receives a request to route a message (typically an SMS message). Conventionally, such routing requests are received by a telecommunication carrier's infrastructure including a home location register (HLR) and associated mobile switching center (MSC). In the claimed invention, on the other hand, the routing request is received by an intermediary that "appears" like the conventional infrastructure, but where, in fact, no such infrastructure exists. As a subset of the steps that the intermediary must perform to appear as, e.g., an MSC to the third party from which the request was received, the intermediary's response to the routing request must include an International Mobile Subscriber Identity (IMSI) value (see, e.g., paragraph [0032]). In accordance with the express limitations in the claims, this IMSI value is dynamically created and is based, at least in part, on the carrier to which the message is to be routed. For example, as explained in paragraphs [0032] and [0037], the dynamically created IMSI value is generated using the mobile country code (MCC) and mobile network code (MNC) of the destination carrier. In other words, the IMSI value is based, at least in part, on identification information associated with the carrier to which the message is to be routed (i.e., the destination carrier). The operative claim language for, e.g., claim 1, is:

dynamically creating an artificial International Mobile Subscriber Identity (IMSI) value based, at least in part, on the carrier to which the second mobile station subscribes.

At least one advantage of this scheme is explained in paragraph [0039] of the specification. Moreover, the created IMSI value is "allowable" and "routable" in terms of

compliance with a SRIForSM message and a follow-on FSM message, where these messages are transmitted over SS7.

With the foregoing in mind, it is clear the cited Papadopolous reference does not disclose or suggest creating an IMSI value as required by the claims. Papadopolous describes a methodology in which a subscriber identity module (SIM) includes a rule for calculating from the already-stored identity (IMSI) at least one further identity (or new IMSI<sub>w</sub>). This may be desirable to create multiple identities for a single wireless device (e.g., for business or for private use, etc.). The disclosed calculation method is to add the value "1" to the original IMSI, i.e., increment the value of the original IMSI. (Col. 4, lines 13-18.) As a result, the generated IMSI value in Papadopolous is not at all related to, and has nothing to do with, a carrier to which a given message is to be routed (i.e., the destination carrier, or "the carrier to which the second mobile station subscribes"). If anything, the generated IMSI value is related only to the subscriber's own carrier, and has no relation to the destination carrier to which a message might subsequently be sent. Indeed, when the new IMSI value in Papadopolous is created, there need not even be a pending routing request. The resulting IMSI *value* in Papadopoulos is therefore entirely independent of a destination carrier and, as such, the IMSI generated in accordance with Papadopolous cannot be "based, at least in part, on the carrier to which [a] message is to be routed," as required by the claims.

In the Advisory Action mailed March 6, 2007, the Examiner cited to a new portion of Papadopoulos (col. 2, lines 51-57) that explains that the calculation of the new identity (presumably a new IMSI<sub>w</sub>) may be performed by a mobile switching center, and not necessarily by the SIM card, and that the mobile station (sending the message) may be roaming in the destination carrier's network. Even if this were the case, the newly created IMSI is still not

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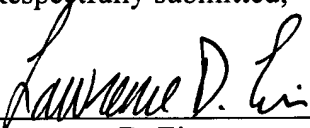
"based, at least in part, on the carrier to which [a] message is to be routed." The newly created IMSI is still a value generated by adding the value "1" (or additional 1s, as the case may be) to the original IMSI, but any such resulting value is still not based, at least in part, on the destination carrier, even though the number itself may have been generated by the mobile switching center of the destination carrier.

Since none of the other references relied upon (including Lam cited against claims 2 and 8) discloses anything regarding dynamic IMSI creation, Applicant respectfully submits that the Patent Office has failed to present a prima facie case of obviousness against the claims in this application.

In view of the foregoing, reconsideration of the rejection based on Papadopoulos and the other applied prior art is respectfully requested.

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